

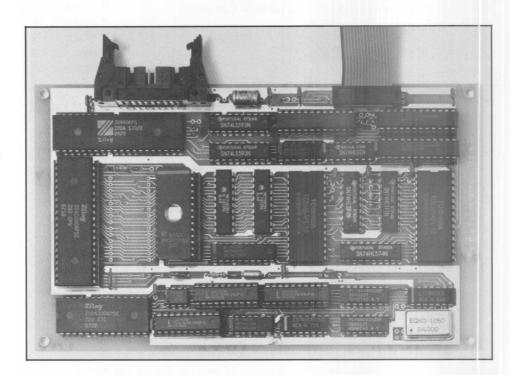
### RS232 CONTROLLER CARD FOR 400 x 640 LCD and PLASMA DISPLAYS SPX20 SERIES

CATALOG NO. SPX20/40/50/60

The SPX20 Series of controller cards provide a simple and complete solution to interfacing complex flat panel displays to an RS232 serial data line.

These cards provide interfaces for keyboards and printers and support a wide range of terminal emulations by using a plug-in EPROM specific to individual emulations. The electronics are based upon the use of programmable logic chips which are software controlled. This allows the cards to interface with Densitron flat panel LCD and Plasma displays with 640 × 400 format.

Various packaging formats and keyboard styles are available.



#### **SERIAL INTERFACES**

The SPX20 provides two full duplex serial ports. The primary port is used for communication with the host computer. The second auxiliary port is used for attaching a printer or other computer peripheral. The two ports can operate at independent Baud rates.

#### **KEYBOARD INTERFACES**

The SPX20 has a custom serial interface port designed to allow a broad range of different types of keyboard styles to be implemented. The serial interface is bi-directional and asynchronous. The SPX20 interrogates the keyboard regularly for updated status.

#### **CONFIGURATION OF THE SPX20**

All configurations are performed on the display screen via the keyboard using the 'Setup Menu'. This technique allows a simple modification without the need for access to the actual SPX20 controller card. Changes in the 'Setup Menu' configuration are non-volatile.

#### **CHOICE OF EMULATIONS**

The SPX20 can be configured to operate with a wide choice of terminal emulations. The emulations allow all standard ASCII characters to be displayed in an 8 × 16 pixel block. Up to 32K bytes of user-defined 8 × 16 graphic blocks can be displayed.

1115 Crestlawn Drive, Suits 1 Mississauga, Ontario L4W 1A7 Tel: (416) 629-0082 Fax: (416) 629-1795



**DENSITRON CORPORATION** A Member of the DENSITRON INTERNATIONAL PLC Group **INFORMATION DEVICE DIVISION** 2540 West 237th Street, Torrance, California 90505 U.S.A. Phone: [213] 530-3530 • Facsimile: [213] 534-8419 [G2/G3] • Telex [II]: 910-349-6200 DENSITRON TRNC

# **SPECIFICATIONS**

#### **DISPLAY FORMAT**

- 80 programmable characters per line
- 16 to 40 programmable number of lines
- Jump or Smooth scroll
- Programmable character cell size up to 8 x 16 pixels
- Double height/width characters

#### **VIDEO ATTRIBUTES**

- Inverse video
- Blink
- Underline
- Half-bright
- Blank (no display)
- Combinations of above

#### **POWER REQUIREMENTS**

■ 5V @ 2W (typical)

#### **HOST and PRINTER INTERFACE**

- Serial asynchronous communication
- EIA RS232C CCITT V.24/V.28 standard other interface options available
- Separate transmit/receive rates
- 50 to 38,400 Baud, 16 settings (up to 19,200 Baud for printer interface)
- Hardware or software flow control
- 7 or 8 data bits
- Odd, even or no parity
- 1 or 2 stop bits
- Full duplex, half duplex or local modes
- Standard ASCII codes

#### SCREEN

Programmable refresh rate

#### **CURSOR**

- Underline, block or disabled
- Flashing or steady

#### **ENVIRONMENTAL CONDITIONS**

- Operating temperature: 0° to 70°C
- Storage temperature: 20° to +85°C
- Humidity: 20 to 80% non-condensing

#### **DIMENSIONS**

7" x 41/4" (178mm x 108mm)

#### **TERMINAL EMULATIONS**

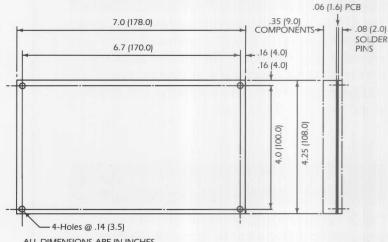
- Customer emulation via EPROM
- Select from list below:
  - DEC VT100, VT220, VT320
  - Datapoint 8220
  - Syscope Mark IV (Systime)
  - Wyse 50 + ADM 22
  - Hewlett Packard HP2622, HP2392
  - Kimtron/IBM PC KT-7/PC
  - Honeywell VIP 7200
  - Tanberg TDU2215
  - ICL 6402G (no graphics options)
  - Data General D210/D211
  - Custom emulations available

#### **KEYBOARD INTERFACE**

Wide range of keyboard styles such as IBM PC XT, AT. Extended AT

## PACKAGED DISPLAY UNITS AVAILABLE

- DT40 640 x 400 DC Plasma cased terminal
- DT41 640 x 400 DC Plasma + SPX 20/40 uncased
- DT60 640 x 400 AC Plasma cased terminal
- DT61 640 x 400 AC Plasma + SPX 20/60 uncased
- DT52 640 x 400 Supertwist LCD cased terminal on an adjustable arm
- DT51 640 x 400 Supertwist LCD + SPX 20/50 uncased



ALL DIMENSIONS ARE IN INCHES.
DIMENSIONS IN PARENTHESIS ARE IN MM.



#### **DENSITRON CORPORATION**

Kyowa Nanabankan 5F, 1-11-5, Omori-Kita, Ota-Ku, Tokyo 143 Japan • Tel. No.: [03] 767-9701 FAX: [03] 767-9709 • TELEX: J26914 DENSITRO J



#### **DENSITRON CORPORATION**

2540 West 237th Street • Torrance, California 90505 U.S.A. • Tel. No.: [213] 530-3530 FAX: [G2/G3] 213-534-8419 • TELEX II: 910-349-6200 DENSITRON TRNC



#### **DENSITRON EUROPE LIMITED**

Unit 4, Airport Trading Estate, Biggin Hill, Westerham, Kent TN16 3BW, England • Tel. No.: [0959] 76600 FAX: [0959] 71017 • TELEX: 957134